about 4 km^2 at Macclesfield to about 94 km^2 at Enfield (Table 1). Waste-waters received secondary or tertiary treatment; wastewater design flows ranged from 0.100 to 0.675 million gallons per day (mgd = 0.0438 $m^3 s^{-1}$)(Table 2).

More intensive study was conducted at two other sites (Fig. 1; Table 1, 2), each having about 10 stations which were sampled monthly for about 20 months. Wastewater from Rich Square received secondary treatment in a stabilizing lagoon (oxidation pond). The effluent entered a small, unnamed tributary and then flowed to Bridgers Creek (Fig. 2) on which downstream sampling stations were established. Bridgers Creek had a watershed area of 9.2 km^2 above its confluence with the unnamed tributary. An oxidation ditch treatment plant provided secondary treatment of Scotland Neck wastewater and discharged to the channelized Canal Creek (Fig. 2). Its waters joined those of Deep Creek (108 km^2 watershed) in a wide floodplain swamp. Treatment plant design flows at these sites were 0.300 and 0.675 mgd (Table 2). Further details of these sites and stations are given in Appendix A and B.